

# **National Pollutant Discharge Elimination System (NPDES)**

# Storm Water Management Program Site Registration Form for West Virginia Municipal Separate Storm Sewer Systems (MS4s) General Permit WV0116025

The site registration application (SRA) is for local governments or other regulated entities to submit the required information necessary for their Stormwater Management Program (SWMP) for compliance under the National Pollutant Discharge Elimination System (NPDES) MS4 General Permit to discharge stormwater runoff from a small municipal separate storm sewer system (MS4).

An authorized signature as required by 47CSR10 is needed to complete the application. All information should be included on this form or if needed, additional information can be attached at the end of the SRA.

Two (2) copies of the site registration application form shall be mailed to the address below.

West Virginia Department of Environmental Protection Division of Water and Waste Management – MS4 Program 601 57<sup>th</sup> Street, SE Charleston, WV 25304

## **Section I. General Information**

## MS4 Operator

Part II A.

1.a. Name of City, County or other public entity that operates a small MS4:

# **VA Medical Center Huntington**

1.b. Mailing Address:

1540 Spring Valley Drive, Huntington, WV 25704

Local staff contact, person responsible for overall program implementation and coordination. (This is the person DEP will contact as the need arises for more information and/or details about your stormwater management program or general questions concerning stormwater in your community.)

1. c. Name: Paul Myers

d. Title: GEMS Coordinator
 e. Phone: 304 429-6755 Ext. 2379

1. f. E-mail address: Paul.Myers@va.gov

## Certification

47CSR10

By completing and submitting this application, I have reviewed and understand and agree to the terms and conditions of #WV0116025 small MS4 General Permit issued on June 22, 2009. I understand that provisions of the MS4 general permit are enforceable by law. Violations of any term and condition of the general permit and/or other applicable law or regulations can lead to enforcement action.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

2. a. Authorized signature	
(1	Mayor or Principle Executive Officer)

2. b. Print name: John Klim

2. c. Title: Chief, Engineering Service

2. d. Date: May 29, 2013

# **Co-permittees** (Complete this section if co-permitting with another MS4 entity)

Part III. A. N/A

- 3. a. Name of MS4 Operator Not applicable
- 3. b. Contact person
- 3. c. Telephone
- 3. d. Address
- 3. e. Email address
- 3. f. Have legal agreements been finalized between co-permittees?
- 3. g. If yes, provide agreement with this application. (With signatures)

# **Section II. Storm Sewer System**

# **Description of storm sewer system**

- 4. a. Area (in acres) that drains into the MS4 from outside the corporate or jurisdictional boundaries: 0
- 4. b. Area (in acres) within current corporate or jurisdictional boundaries: 106
- 4. c. For all MS4s, population (using the most recent U.S. Census data) for area served: **1500** (Universities: give current enrollment plus staff and faculty. Transportation agencies: give population of your MS4 in urbanized areas. Prisons; give current inmate plus staff population.)

#### Part IV.B.

4. d. Latitude and Longitude of representative outfall:

Longitude - Degrees: 82 Minutes: 31 Seconds: 00 Latitude - Degrees: 38 Minutes: 22 Seconds: 35N

Tip: The MS4 general permit requires that you sample from one representative outfall twice a year. The location of this outfall will be in your most densely populated area.

#### Part IV.B.

4.e. Describe the physical location of your representative outfall. If a street address is not possible use cross street descriptions. **Stormwater outfall - south slope by Bldg 27 (Old Sewer Pumphouse)** 

## Part IV.B.

4.f. Describe your monitoring plan to include the frequency and parameters.

The Huntington VAMC will comply with the stormwater monitoring standards described in Part IV.B of WV DEP General NPDES Water Pollution Control Permit and will monitor the outfall designated above once every six months, during the spring and fall season. Samples will be collected during the first flush of rainfall runoff for at least 20 minutes, but not more than 50 minutes after a rainfall of at least 0.5 inches has begun, preceded by a period of dry weather of at least 48 hours. The Huntington VAMC will monitor for the following parameters:

<u>Parameter</u>	EPA Method No.	Method Detection Limit (mg/l)
Total Kjeldahl Nitrogen	351.4	0.03
Nitrate Nitrogen	300.0	0.002
Nitrite Nitrogen	300.0	0.004
Total Phosphorus	365.4	0.01

The Total Nitrogen value to be reported on the Discharge Monitoring Report shall be the sum of the Total Kjeldahl Nitrogen, Nitrate and Nitrite. If all three constituents of total nitrogen are not detected at its method of detection limit (MDL) the Huntington VAMC will sum the actual MDLs for each constituent and report the result as less than the calculation. When calculating the sum of the constituents for total nitrogen, the Huntington VAMC will use the actual analytical results when these results are greater than or equal to the MDL for a particular constituent and use zero for a constituent if one or two of the constituents are less than the MDL The Huntington VAMC agrees to use the methods in the table above, as outlined in the General WV/NPDES Permit for Small Municipal Separate Storm Sewer Systems.

# **Storm Sewer Infrastructure**

Provide the most accurate number possible.

5. a. Storm sewers, in feet	5250
5. b. Open ditches, in feet	300
5. c. Outfalls	17
5. d. Catch basins	50
5. e. Detention* facilities	Rip/Wrap gravel along roadways and some
	headwall outfalls. Majority of parking areas
	are curb-less or have curb cuts allowing SW
	direct access to soil.
5. f. Retention** facilities	None
5. g. Treatment facilities	None
5. h. Regional stormwater facilities	None

What's the difference between Detention and Retention?

\*DETENTION- short-term storage of stormwater.

The objective of a detention facility is to regulate the runoff from a given rainfall event and to control discharge rates to reduce the impact on downstream stormwater systems.

\*\*RETENTION— permanent storing of stormwater indefinitely. Water is stored until it is lost through percolation, taken in by plants, or through evaporation. Retention systems do not have any discharge of stormwater and associated pollutants.

6. a. Does your MS4 receive stormwater discharges from WVDOT storm sewer system, roads or right-of-ways? **No** 

- 6. b. Does your MS4 discharge into WVDOT storm sewer systems or right-of-ways? No
- 7. Is your MS4 interconnected with another MS4? (Does stormwater flow into or out of your storm sewer system to or from another MS4?) If yes, describe. **No**
- 8. Does your municipality contain combined sewer systems? The Medical Center has reviewed its sanitary sewer piping and verified no cross connections exist with the storm system.
- 9. a. What percentage is drained by Combined Sewer System? **None**
- 9. b. What percentage is drained by separate storm sewer system? 100%

# **Industrial Facilities owned by the MS4 entity**

Part II.C.b.6.d.

10.a. Does your MS4 own and/or operate an industrial facility that discharges stormwater into the MS4? Yes. The Huntington VAMC campus sits on 106 acres is comprised of multiple buildings and facilities, houses the Marshall University School of Pharmacy, has parking spaces comprising roughly 2,340,000 sq. ft., and approximately 2.0 miles of asphalt roadways.

Tip: These types of facilities include vehicle maintenance garages, vehicle washing or fueling areas, parks and recreational facilities that may store chemicals, pesticides and/or fertilizers, salt storage facility, waste transfer facility, wastewater treatment plants and any other industrial facility. Please note, additional information about your facilities must be provided under Minimum Control Measure #6.

# 10.b. If yes, how many?

The Medical Center has the following campus support services on the grounds that could discharge pollutants to the MS4:

ponutants to the N	104.		
Building	Shop	Activities	
Bldg 3	Boiler Plant	Fueling (skid tank)	
		Fleet parking	
Bldg 34	Grounds /Maintenance	Herbicide/pesticide/fertilizer	
		Salt storage	
		Grounds Equipment storage	
		Grounds Equipment Maintenance	
		Landscaping material	
		Car washing	
BRAC	Engineering	Fleet parking	
		E85 Fueling station (2014)	
Campus wide	Engineering	Solid Waste dumpsters (4)	
		Scrap metal dumpster (1)	

(Item 11 is intentionally empty)

## **Map Requirements**

Please provide a legible map that identifies the following information:

- 12. a. City, County or jurisdiction boundaries Huntington VAMC boundaries provided.
- 12. b. State or Federal operated vocational/college/university campuses and military institutions. N/A
- 12. c. Urban area as defined by the 2000 Census, use 2010 Census data if available. N/A
- 12. d. Municipal, County, or State wastewater treatment plants and their associated outfalls N/A
- 12. e. Landfills. N/A
  - 12. f. Municipal, County or State operated vehicle or fleet maintenance garages. N/A The Huntington VA has a rather large fleet but short of an occasional car washing, maintenance activities are performed by area vendors.
- 12. g. Any other Municipal, County or State operated industrial activities, these could include; salt storage areas, parks and recreational areas, chemical storage areas, etc. The Huntington VAMC does store road salt on site, but salt is purchase in 50-100 # bags and stored undercover.
- 12. h. Arterial, Municipal, or State roads N/A
- 12. i. Stormwater discharge points and receiving streams. The Huntington VAMC needs to updates its stormwater map to reflect numbered outfalls and catch basins.
- 12. j. Streams and waterways within the MS4? No streams or waterways directly within our MS4.
- 12. k. Delineation of watershed area that drains into your MS4. N/A

#### Part.II.C.b.3.a.iv.

12.1. Submit paper maps folded to 8.5" x 11".

#### Part.II.C.b.3.a.iv.

12.m. Multiple maps must be of the same scale, 1:1000 or 1:2000.

# Receiving Streams and Impaired Waterbodies/TMDLs

Part III.D.1

List all named receiving waters within your MS4 jurisdiction. Indicate those identified as impaired pursuant to Clean Water Act Section 303(d). For a listing of West Virginia's impaired water bodies and the source of impairment please use WVDEP's most recent 303d list found at this website:

http://www.dep.wv.gov/WWE/watershed/IR/Pages/303d 305b.aspx

## Part III.D.1.a.

13. Locations & Pollutants of Concern

Name of receiving stream	Impaired?	Parameters of impairment	Has a TMDL been
	Yes or No		established? Yes or No
Krouts Creek	Y	Biological; Fecal Coliform; Iron	No
Twelve pole Creek	Y	Biological	No

Please add additional pages if needed to list your Receiving Waterbodies and any impairments.

## \*\*IMPORTANT\*\*

MS4s that discharge into a receiving water which has been listed on the West Virginia Section 303(d) list of impaired waters, and with discharges that contain the pollutant(s) for which the water body is impaired, *must* 

document in the SWMP how the BMPs will control the discharge of the pollutant(s) of concern. They must demonstrate that there will be no increase of the pollutants of concern. As you work your way through, describing the various practices, consider how that BMP will address or control the pollutant of concern.

If your MS4 discharges into a water body with an approved TMDL, and that TMDL contains requirements for control of pollutants from the MS4 stormwater discharges, then your SWMP must include BMPs *specifically targeted to achieve the wasteload allocations prescribed by the TMDL*. A monitoring component to assess the effectiveness of the BMPs in achieving the wasteload allocations must also be included in the SWMP. Monitoring shall be specific for the pollutants of concern and be of sufficient frequency to determine if the stormwater BMPs are adequate to meet wasteload allocations. Monitoring can entail a number of activities including but not limited to: outfall monitoring, in-stream monitoring, and/or modeling.

14.a. List and quantify the BMPs you plan to implement to address each impairment. For each BMP describe how it is expected to control the pollutant of concern.

The Huntington VA Medical Center sits on approximately 106 acres in a rural sitting where deer, turkey, occasional dog and/or cat are known to roam. The medical center knows of no BMP's that could be applied to fecal coliform discharge to address this situation. Pets as a rule are not permitted on station. The occasional guide or companion dog that visits the medical center is cleaned up after and waste appropriately disposed of by their owner; as such improper pet waste disposal is not a major issue. Pet waste education however is periodically distributed via our electronic newsletter to staff as part of our Stormwater awareness efforts. The Medical Center has reviewed its sanitary sewer piping and verified no cross connections exist with the storm system. Should a cross connection be identified however, the Huntington VAMC will implement corrective action measures to eliminate the problem.

Sewer line inspections are not part of our routine preventive maintenance plan but the Medical Center does utilize area sewer clearing companies to maintain proper operation when an occasional blockage occurs. The Medical Center does falls under the city of Huntington's Grease Ordinance and has applied for and received Permit No. 042109-219A-2, Grease Interceptor Discharge Permit. Grease traps (3) have been installed in the Canteen and Nutrition & Food Service kitchens, are inspected daily, maintained by facility staff and the program is reviewed on a bi-annual basis by the Huntington Sanitary Board. Compliance with this ordinance is a BMP for fecal coliform and biological which prevents combined sewer overflow.

Visual assessments of outfall locations 2X per year will be a BMP. The medical center will reassess its BMP's when TMDL limits are established for the two receiving streams of our MS4.

Stormwater is also a potential source of iron pollution and CNA biological (cannot attain). The Huntington VAMC will implement BMP's to control discharge of these from its campus. A preliminary assessment has identified a potential source of iron - runoff from construction sites. This SWMP addresses the potential source of iron from construction projects in the following ways:

- The medical center will assure the necessary NPDES construction permits are obtained and that our contractors abide by the rules and regulations outlined in these permits.
- Contractors will be required to utilize appropriate BMPs as stated in the West Virginia Erosion and Sediment Control BMP Manual.

• The Contracting Officer Representative (COR) will review the construction site to verify that appropriate BMPs are in place and functioning as designed as part of their routine daily inspections.

Tip: BMPs for Fecal Coliform might include a robust pet waste program; sewer line inspections and repair; procedures for identifying and repairing failing septic tanks.

Your plan needs to be <u>quantifiable</u>. For example: how many sewer line inspections do you plan to conduct each year? How many and of what sort of outreach campaigns to the community about pet waste do you plan to conduct, etc.?

## Part III.D.1.b & Part III.D.2

- 14.b. Describe your monitoring plan for impaired waterbodies and those with TMDLs. Give locations and frequencies. The medical center will track the progress of the fecal coliform TMDL and reassess its BMP's when limits are established for the two receiving streams of our MS4.
- 14.c. If visual documentation of removal of pollutant sources is a component of your plan please describe fully. For example, do you plan to use before and after photos? The Huntington VAMC will conduct dry weather visual illicit discharge monitoring as well as semiannual outfall inspections and record such events with photos. Our plan is to photograph the outfalls to serve as documentation of the visual assessment. Photographs may also be utilized to assess compliance with construction projects (taken before, during and at the end).

## Evaluating the effectiveness of your SWMP for impaired waterbodies/TMDLs

- 14.d. Explain how your approach is expected to achieve wasteload allocations for waterbodies with established TMDLs. Discuss flow monitoring, outfall monitoring, in-stream monitoring, modeling, and/or other methodology to evaluate effectiveness. Once TMDLs are approved for the 2 impaired water bodies surrounding our MS4, the Huntington VAMC will review and modify its SWMP within 6 months of the establishment of these limits should stressors attributable to the MS4 be identified.
- 14.e. Explain how will you determine if your SWMP and mix of BMP's need to be modified to meet wasteload allocations? **No waste load allocations have yet been assigned**

You are required to evaluate the effectiveness of your stormwater management program and your chosen BMP's. There are a variety of ways to do this. By identifying appropriate evaluation methods early, you then have a road map that will guide overall program implementation and BMP implementation. For example, you might analyze all your monitoring data, assess how aggressively your chosen BMPs were used, and describe any reductions in the pollutant of concern.

## **Section III. Minimum Control Measures**

## **Instructions:**

For each Minimum Control Measure (MCM), state your control objective and describe BMPs selected for implementation in your jurisdiction. For each BMP, include a brief description, measurable goals, and milestones as appropriate towards achieving each goal. Indicate if the BMP is part of an existing program and if another entity will share responsibility for implementing that BMP.

In cases where another entity will perform one or more BMPs or components thereof on behalf of the permittee, specifically describe the activities each entity will conduct and include reference to legal agreement where appropriate.

Describe as many BMPs as necessary to fulfill the requirements of the small MS4 General Permit. If you need more space attach additional pages.

## **Measurable Goals**

Measurable goals are numeric or narrative standards used to gauge program effectiveness. These are design objectives or goals that quantify the progress of program implementation. For each BMP a measurable goal must be established. Describe what you expect to accomplish or achieve by certain dates or milestones, when you implement that particular BMP. Your expected outcome or accomplishment should be expressed as a measurable goal. You should have a variety of short and long term goals.

Milestones are a quantifiable target to measure progress toward achieving the activity or implementation of that BMP.

Additional guidance on selecting BMPs and developing measurable goals can be found at the following EPA website: <a href="https://www.epa.gov/npdes/stormwater/measurablegoals/index.htm">www.epa.gov/npdes/stormwater/measurablegoals/index.htm</a>

USEPA's measureable goal guidance can be found here: <a href="http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm">http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm</a>

# Your stormwater management program should specify:

- What needs to happen (Specific stormwater control measure)
- ➤ Who needs to do it (Which department of the MS4 will be implementing this stormwater control measure?)
- ➤ How much they need to do (milestones and measurable goals)
- ➤ When they need to get it done
- Where it is to be done

There must borogress.	pe specific performance measures	s. Without a goal, you will have a difficult time measuring	ng
	Wast Virginia small MCA gapars		1 /

# Public Education and Outreach on Storm Water Impacts – MCM #1

Part II.C.b.1.

## **Responsible Person**

Identify the responsible person(s) for implementing this MCM. (There may be more than one person or different departments that provide outreach to various targeted groups. If so, discuss.)

15.a. Name: John Klim Name: Paul Myers

15.b. Title: Chief, Engineering Service Title: GEMS Coordinator 15.c. Department: Engineering Department: Engineering

15.d. Address: 1540 Spring Valley Drive Address: 1540 Spring Valley Drive

 15.e.
 Phone number: 304 429-6755 Ext 2374
 304 429-6755 Ext 2379

 15.f.
 Email address: John.Klim2@va.gov
 Paul.Myers@va.gov

#### Part II.C.b.1.

15.g. State your overall objective for this minimum control measure.

- Provide medical center campus education on the impacts of stormwater discharge and practices that reduce or eliminate adverse stormwater impacts.
- Provide opportunities for public involvement in the Storm Water Management Program in an effort to enhance water quality in and around the Huntington VA Medical Center campus.
- 15.h. State and describe your BMPs. Indicate if BMP are part of your existing program. As this is a new program for the Huntington VAMC, a number of our BMP's are part of existing waste minimization, recycling, and pollution prevention (P2) programs. The Huntington VAMC has a robust recycling program, achieving a diversion rate of >50% the past two years. The BMP's we have listed in this registration should lead to greater awareness and public involvement in stormwater management and water quality activities.
- 15.i. Is another entity sharing responsibility for the BMP? If so, who? N/A

## **MCM Components**

Part II.C.b.1.a.i

- 15.j. Describe your education and outreach strategy targeting the general public.
  - The Huntington VAMC will prepare a minimum of 4 storm water awareness articles per year to be run in its electronic newsletter to all employees.
  - The Medical Centers volunteer Adopt A Highway group will perform a minimum of 2 litter pickups a year (weather permitting).
  - The Huntington VAMC will conduct annual training reviews of its SPCC, track participation, as well as track the number of chemical spills occurring onsite annually.
  - The Huntington VAMC will conduct annual training review of its Hazard Communication /Chemical Spill response, and record/track participation.
  - Establish a storm drain identification program (stencil project) as a means to educate the public about the potential impacts of their activities on the receiving waters. Employing VA

Rec Therapy patients, we will stencil storm drains to convey the message "Only Rain Down this Drain".

• The GEMS Coordinator will post Stormwater information to bulletin boards or prepare displays in areas accessible to VA patients, their families as well as VA staff. These education events will be recorded.

#### Part II.C.a.ii

15.k. Describe your education and outreach strategy targeting businesses including home-based and mobile businesses. This is a rare occurrence, but on a case by case basis the medical center will monitor contractor performance for conformance with local, state and federal requirements.

#### Part II.C.b.1.a.iii.

15.1. Describe your education and outreach strategy targeting homeowners, landscapers, and property managers. **N/A** 

## Part II.C.b.1.a.iv

15.m. Describe your education and outreach strategy targeting engineers, contractors, developers, review staff, and land use planners.

VA has yet to upgrade its national Construction specifications to comply with runoff from new development and redevelopment. Until such time, work of this magnitude will required the Contracting Officer Representatives (COR) to incorporate site planning, design, construction, and maintenance strategies for the property to maintain/restore, to the maximum extent technically feasible pre-development hydrology with regard to the temperature, rate, volume, and duration of flow into project design. This will be accomplished by:

- Minimize impervious surfaces
- Preserve, protect, create and restore ecologically sensitive areas
- Prevent or reduce thermal impacts to streams
- Avoid or prevent hydro-modification of streams and other water bodies
- Protect trees and other vegetation
- Protect native soils

## **Schedule**

#### Part II.C.a.1

- 15.n. Provide a schedule for implementing each component, including dates for interim and full implementation.
  - Stormwater articles are already being distributed via electronic newsletter
  - Adopt A Highway is already being conducted 2 pickups a year
  - SPCC, Hazard Communication and Chemical Spill response training are conducted annually.
  - Chemical spills have been tracked for a number of years as a Performance Improvement Measure.
  - A storm water stenciling project should be completed within 12 months.
  - VA national construction specifications are not within the control of the medical center, and no time frame can be provided at this time, however Engineering Projects COR's will initiate actions outlined above within 12 months of acceptance.
  - Develop a means to measure the number of "hits" to Stormwater articles published to the Huntington VAMCs electronic newsletter. (12 months)

#### Part II.B.4

- 15.o. List and fully describe your Measurable goal(s) for this MCM.
  - The Huntington VAMC will prepare a minimum of 4 storm water awareness articles per year to be run in its electronic newsletter to all employees.
    - Milestone: Develop a means to measure the number of "hits" to Stormwater articles published.
  - Record the number of Adopt A Highway events conducted by the Medical Center (minimum of 2 litter pickups a year weather permitting).
  - Record the number of spills that occurs onsite annually.
  - Record the number of Stormwater information events applied to bulletin boards or displays in areas accessible to VA patients, their families as well as VA staff.
  - Track the quantity of materials recycled each year. Federal facilities are required to obtain a 50% diversion rate by 2015. Used cooking oil is collected and recycled (tracked by pounds /yr.).
  - The Huntington VAMC will conduct annual staff reviews of its SPCC and Hazard Communication/Chemical Spill response plans.
  - Construction activities performed by the VAMC will have measures in place to guard against erosion. 100% of all site construction projects untaken by the Huntington VAMC will have all appropriate permits and approvals before ground breaking commences and projects exceeding 5,000 square feet will incorporate the use of site planning, design, construction and maintenance strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with the regard to temperature, rate, volume and duration of flow.

## **Tracking**

Part II.C.b.1.c.

- 15.p. Describe your plan to track the activities associated with this MCM.
  - Existing performance measures are currently tracked via Excel spreadsheet and/or Practice Greenhealth on line data base. Measures are tracked quarterly and reported annually in the GEMS Annual Effectiveness report. Proposed new activities will be added, tracked and incorporated in a similar fashion.

## **Evaluation**

Part II.B.7 & Part II.C.b.1.b.

15.q. Explain how you plan to gauge the effectiveness of your public education and outreach efforts?

- The Huntington VAMC will prepare a minimum of 4 storm water awareness articles per year to be run in its electronic newsletter to all employees.
- Record the number of Adopt A Highway events conducted by the Medical Center (minimum of 2 litter pickups a year weather permitting).
- Record the number of spills that occurs onsite annually.
- Record the number of SW information events applied to bulletin boards or displays in areas accessible to VA patients, their families as well as VA staff.
- Track the quantity of materials recycled each year. Federal facilities are required to obtain a 50% diversion rate by 2015.

- The Huntington VAMC will conduct annual staff reviews of its SPCC and Hazard Communication/Chemical Spill response plans.
- Construction activities performed by the VAMC will have measures in place to guard against erosion. 100% of all site construction projects untaken by the Huntington VAMC will have all appropriate permits and approvals before ground breaking commences and projects exceeding 5,000 square feet will incorporate the use of site planning, design, construction and maintenance strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with the regard to temperature, rate, volume and duration of flow.

TIP: Changes in awareness, knowledge, and attitudes can be measured effectively using statistically valid surveys or questionnaires. Other approaches include monitoring attendance at public meetings, tracking requests for information, and counting hits on web sites. Keep in mind that simply reporting the number of meetings held or the number of brochures printed is not an effective method to document changes in stormwater knowledge.

Assess behavior changes. Measurement of change in pollution-generating behavior in a watershed can be an important indicator of progress toward achieving SWMP goals. Examples include: A. Changes in lawn fertilizer sales in response to a publicity campaign, B. Pounds of hazardous waste turned in at collection events, participation in streambank clean-up events, and C. Sign-ups for environmental action pledges.

## **Public Involvement and Participation – MCM #2**

Part II.C.b.2.

**Responsible Person: Name:** 

16a Name: John Klim Name: Paul Myers

16b. Title: Chief, Engineering Service
16.c. Department: Engineering
Department: Engineering

16.d. Address: 1540 Spring Valley Drive Address: 1540 Spring Valley Drive

 16.e. Phone number: 304 429-6755 Ext 2374
 304 429-6755 Ext 2379

 16.f. Email address: John.Klim2@va.gov
 Paul.Myers@va.gov

Identify the responsible person(s) for implementing this MCM. There may be more than one person or different departments responsible for various projects. If so, discuss.

16.g. State your overall objective for this minimum control measure.

Provide opportunities for public involvement and participation in SWMP activities in and around the Huntington VAMC campus.

16.h. State and describe your BMPs. Indicate if the BMP is part of the existing program.

This is a new permit.

BMP	Measurable Goal	Months After SWMP Approval
#1 Stormwater Involvement	Make the SWMP, SWMP inspection, testing and annual effectiveness reports available. <i>Milestone - develop a mechanism to collect, track, post these online to the VA's website.</i>	As necessary
<b>#2 Advertise Public involvement</b> activities	Post activities such as education session, meetings and events,	As necessary
#3 Stormwater Involvement	Write and publish a minimum of 4 SWMP awareness articles	Annually
#4 Stewardship/ Public Involvement Projects	Conduct a minimum of 2 Adopt A Highway Events per year	Annually
#5 Stewardship/ Public Involvement Projects	Storm Drain Stencil Project: Using VA patients, to convey the theme "Only Rain Down the Drain", storm drains in the immediate vicinity of the med center (8 -10) will be stenciled.	End of 2014
#6 Stewardship/ Public Involvement Projects	VA Contractors will have all appropriate permits and approvals before ground breaking commences.	As necessary
#7 Stormwater Involvement	GEMS Coordinator will represent the Huntington VA and attend state MS4 meetings	Currently in Place

16.i. Is another entity sharing responsibility for the BMP? If so, who? No.

## **MCM Components**

Part II.C.b.2.

16.j. Describe at least two methods you plan to use to engage the public in your SWMP.

Refer to MCM#2 table above – BMP # 2 & # 4

Part II.C.b.2.a

16.k. Describe how you will accommodate public participation in the decision making process for your SWMP.

Refer to MCM#2 table above – BMP #1, #2 # 5,

Part II.C.b.2.b

16.1. Describe your communication process for notifying groups of opportunities to become involved in stormwater activities in your watershed(s).

Refer to MCM#2 table above - BMP #3, #4,

Part II.C.b.2.c

16.m. List the URL of your *Stormwater* website. N/A

## **Schedule**

Part II.C.a.1

16.n. Provide a timeline of implementation of each component of your program for this MCM, including dates for interim and full implementation.

Refer to MCM#2 table above – BMP #1, #2 #3, #4, #5, #6, #75,

Part IV.A. & Part II.B.4

16.o. List and fully describe your measurable goal(s) for this MCM.

## Tracking Refer to MCM#2 table above

Part II.B.7.

16.p. Describe your plan for tracking activities associated with this MCM.

## **Evaluation**

Part II.B.7

- 16.q. Explain how you plan to gauge the effectiveness of your Public Involvement and Participation program.
  - Activities will be tracked and reported in the annual GEMS Effectiveness Report
  - Post activities such as education session, meetings and events,
  - Write and publish a minimum of 4 SWMP awareness articles
  - Conduct a minimum of 2 Adopt A Highway Events per year
  - Storm Drain Stencil Project: Using VA Rec Therapy patients storm drains in the immediate vicinity of the med center (14 17) will be stenciled to convey the message "Only Rain Down the Drain"

- VA Contractors will have all appropriate permits and approvals before ground breaking commences.
- GEMS Coordinator will represent the Huntington VA and attend state MS4 meetings

## Illicit Discharge Detection and Elimination – MCM #3

Part II.C.b.3.

# **Responsible Person**

Identify the responsible person(s) for implementing this MCM. If there is more than one person or department responsible for implementation of this MCM, please discuss.

# **Responsible Person: Name:**

17aName: John KlimName: Paul Myers17b.Title: Chief, Engineering ServiceTitle: GEMS Coordinator17c.Department: EngineeringDepartment: Engineering

17.d. Address: 1540 Spring Valley Drive Address: 1540 Spring Valley Drive

 17.e. Phone number: 304 429-6755 Ext 2374
 304 429-6755 Ext 2379

 17.f. Email address: John.Klim2@va.gov
 Paul.Myers@va.gov

17.g. Is another entity sharing responsibility for the MCM? If so, who?

# **Control Objective & BMPs**

17.h. State your overall objective for this MCM.

Develop, implement and enforce a program to detect and remove non-stormwater discharges, illicit connections and illegal dumping/discharges into the MS4.

17.i. State and describe your BMPs. Indicate if any BMPs are part of your existing program.

develop, implement and enforce a program to detect and eliminate illicit discharges.

BMP	Measurable Goal	<b>Months After SWMP Approval</b>
<b>Inspection Procedures</b>	Conduct Semiannual inspection of all	Currently in place
	outfalls. <i>Milestone – stencil headwalls</i>	
	with outfall ID	
MS4 Mapping	Create and maintain a map of all SW catch	In development – no later than
	basins, storm sewers and outfalls.	12 mo.
<b>Inspection Procedures</b>	Monthly inspections will be performed and	In place
	documented on all AGT's, UST's, Oil	
	filled transformers and oil filled hydraulic	
	elevator reservoirs in accordance with its	
	SPCC plan to assure secondary	
	containment is functioning as designed and	
	no spills or leaks have occurred.	

Pollution Control	The VAMC Grounds Group conducts street sweepings on an as needed basis using a small sweeper owned and maintained by the VAMC. This activity is performed during the spring, summer and fall. The Medical Center does not have a means to measure the quantity of sweeping collected and we estimate the equipment is run on average an hour a day – 5 days a week during the specified time frame.  Work will be documented in the DHCP work order system.	In place
<b>Pollution Control</b>	Install an oil/water separator in the Bldg. 25 Parking Garage.	36- 72 mo
Pollution Control	The VAMC uses salt and Cryo Tech Deicing pellets for parking garage and road de-icing during winter months. The medical center will utilize minimal quantities and keep spillage in storage locations cleaned up to prevent excess runoff.	In place
Pollution Control	The Huntington VAMC will record the quantity of pesticides, herbicides and fertilizers applied by contractors and grounds crew annually.	In place

## **MCM Components**

Part II.C.b.3.a.

17.j. Do you have a current map of your municipal storm sewer system? We have a map of the storm system and are presently updating and identifying outfalls, catch basins, storm sewers.

Does your map components include/do you plan to include:

Part II.C.b.3.ai

- 17.k. All known storm sewer outfalls? Yes
- 17.1. Receiving waters? No receiving streams are well beyond our boundaries but are identified within the permit.

- 17.m. Structural BMP's owned, operated or maintained by the permittee? Structural BMPs refer to physical structures designed to remove pollutants from stormwater runoff, reduce downstream erosion, provide flood control, and promote groundwater recharge- require engineering design and engineered construction. At the present time we have nothing in this category but will update mapping to reflect in the future.
  - 17.n. The location and type of all other stormwater conveyances located within the boundaries of the permittees MS4 watershed? **Yes the Huntington VAMC will map its conveyances within its boundaries.**
- 17.o. Updating the known connections to the municipal separate storm sewer authorized after July 22, 2009? **N/A**
- 17.p. Geographic areas that discharge stormwater into the permittees MS4, which may not be located within the municipal boundary? **N/A**

Tip: Your map should show new outfalls, structural stormwater BMPs owned by the MS4, other stormwater conveyances, and other pertinent information. You must update your map on an annual basis.

Part II.C.b.3.b.

17.q. Do you have an IDDE Ordinance? **No** 

Part II.C.b.3.b.

17.r. Describe your Ordinance review and update procedure, including milestones of IDDE Ordinance review. The Huntington VAMC however prohibits non-stormwater, illegal discharges and/or dumping into the storm system The Chief Engineer direct this program, instructing staff to review procedures and pollution prevention requirements in accordance with local, state and federal regulations.

Does your IDDE Ordinance prohibit the following: Part II.C.b.3.ii

- 17.s. Discharges from hyperchlorinated water line flushing? Yes or No. If not, how are these discharges handled when they occur?
  - According to EPA's-Stormwater Phase II Final Rule, Fact Sheet 2.5 -Illicit Discharge Detection and Elimination Minimum Control Measure January 2000 [Revised December 2005), the MS4 program does not need to address hyper chlorinated water line flushing. The Huntington VAMC does not consider this discharge as a significant contributor of pollutants in the MS4. The Huntington VAMC is considered a Class 1 Water system.
- 17.t. Lawn watering and other irrigation runoff? Yes or No. If not, have you addressed lawn watering in your public education and outreach activities?
  - According to EPA's-Stormwater Phase II Final Rule, Fact Sheet 2.5 -Illicit Discharge Detection and Elimination Minimum Control Measure January 2000 [Revised December 2005] the MS4 program does not need to address lawn watering or other irrigation runoff. The Huntington VAMC does not consider this discharge as a significant contributor of pollutants in the MS4.
- 17.u. Street, parking lot, and sidewalk wash water, and external building wash down? Yes or No. If not, have you addressed these types of runoff in your public education and outreach activities?

  According to EPA's-Stormwater Phase II Final Rule, Fact Sheet 2.5 -Illicit Discharge Detection and Elimination Minimum Control Measure January 2000 [Revised December 2005], the MS4 program does not need to address street, parking lot, and sidewalk wash water. The Huntington VAMC does not

consider this discharge as a significant contributor of pollutants in the MS4. As the Medical Center performs dry street sweeping with its own equipment during the spring, summer and fall, it would indeed be a rare occurrence for this type of activity to occur.

Part II.C.b.3.b.v.

17.v. Does your IDDE Ordinance include escalating enforcement procedures and actions? VA contract language contains punitive actions for contract work. Disciplinary action will be taken by the Chief Engineer regarding any employee infractions.

Part II.C.b.3.b.v.

17.w. Briefly describe your enforcement strategy. No enforcement as this is a federal VA medical center.

Tip: The IDDE Ordinance shall be reviewed on an <u>annual</u> basis. The Ordinance shall be reviewed to ensure that it contains the necessary required information that the 2009 small MS4 general permit requires.

Your Ordinance is required to prohibit and eliminate non stormwater discharges, illegal discharges, and/or dumping into the storm sewer system, and any necessary procedures for evaluation, assessment, investigation and enforcement to prevent polluted stormwater discharges from entering local streams, lakes or rivers. Except for newly permitted entities, MS4's should already have this Ordinance in place.

Part II.C.b.3.c.

17.x. Describe your field assessment activities, including how many assessments you plan to conduct each year.

The Medical Center presently conducts and documents weekly and monthly inspections of its oil and fuel storage devices in accordance with our Spill Prevention Counter and Countermeasures Plan (SPCC). The Medical Centers Industrial Hygienist performs and documents weekly chemical waste storage inspection of our two (2) Hazardous Waste Storage locations. Our Environmental Rounds Team performs and documents inspections of every location in the Medical Center a minimum of 2X per year – which includes all chemical storage locations.

The Huntington VAMC has already initiated outfall, pipe, and catch basin inspections on a 2X per year frequency. Dry weather flow is checked for discoloration, odors, including sewage and chlorine if applicable. Inspection is presently being performed by the facility GEMS Coordinator. When intermittent or non-intermittent flows are discovered, the Huntington VAMC will initiate action to determine whether or not the flow is ground or spring water or if it is indeed an illicit discharge.

Part II.C.b.3.c.i.

17.y. Describe how you will locate "priority areas". **Priority areas for materials with spill potential have been identified and are being inspected on various frequencies.** 

Part II.C.b.3.c .iii

17.z. Describe your procedures for characterization of illicit discharges.

Conduct visual observations and screenings. If applicable, conduct follow-up monitoring on suspicious discharges (i.e., dye-tests, smoke tests), and removal of illicit discharges that are found due). A copy of the Center for Watershed Protection - Illicit Discharge Detection and Elimination manual is on hand to serve as a reference to develop procedures for the characterization, tracing and removal of Illicit discharge sources.

Part II.C.b.3.c .iv

17.aa. Describe your procedures for tracing the source of the discharge.

Promptly investigate suspected illicit discharges, utilize our storm sewer map to help identify possible locations and/or source of the discharge. Evaluate options, select the preferred option, and eliminate the source of the illicit discharge. A copy of the Center for Watershed Protection - Illicit Discharge Detection and Elimination manual is on hand to serve as a reference to develop procedures for the characterization, tracing and removal of Illicit discharge sources.

Part II.C.b.3.c.v

17.bb. Describe your procedures for removing the source of the discharge.

In the event of a discharge, the Huntington VAMC has a number of emergency procedures already in place (i.e. -Engineering Memorandum #1 – Failure of Major Utility Systems; #2 – Spill Prevention and Countermeasure Plan; OS2- Hazardous Materials Management). These will be activated to remediate the cause of the discharge.

Tip: Each permittee shall continue to assess, update and implement an ongoing program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the MS4.

C.b.3.d.

17.cc. Describe how you will inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.

Face to face service staff sessions or via electronic newsletter articles - campus education will be conveyed on the impacts of IDDE stormwater discharge and practices in place at the Medical Center that reduce or eliminate these adverse stormwater impacts.

Part II.C.b.3.f.

17.dd. Describe your plan to training your staff on the identification and reporting of illicit discharges. Include the number of training sessions planned for each year.

The Huntington VAMC will provide training support to staff responsible for field assessments on the identification and reporting of illicit discharges. Other VA employees who may come into contact with illicit discharge through their field work will receive training annually.

## **Schedule**

Part II.C.a.1

17.ee. Describe how and when you will implement each component of program, including dates for interim and full implementation.

Refer to 17i chart.

## **Measurable Goals**

Part II.B.4

17.ff. List and fully describe your Measurable goal(s) for this MCM:

Refer to 17i chart.

# **Tracking:**

Part II.C.b.3.d.ii & Part II.C.b.3.e.

17.gg. Describe your procedures for tracking activities related to each component of this MCM.

The Huntington VAMC will utilize its Green Environmental Management System (GEMS) Committee to track/monitor all activities of is storm water management program.

## **Evaluation**

Part II.B.7

17.hh. Fully explain how you plan to gauge the effectiveness of your IDDE program.

Chemical spills occurring at the Medical Center have been a long standing Performance Measure and have been tracked for years. Historically chemical spills have been infrequent and small in quantity. Any illicit discharges discovered during inspections or as a result of emergency will be reviewed and tracked through the GEMS Committee to assess possible trends or procedural problems in IDDE effectiveness.

Tip: The IDDE program evaluation can consist of a data base that contains the information including tracking the number and type of spills, illicit discharges identified, inspections conducted, illicit connections removed, and any feedback received from public education efforts. If you have a hotline, you may also be able to determine trends of awareness to your IDDE program.

## **Construction Site Run-off Control – MCM #4**

Part II.C.b.4.

## **Responsible Person:**

Identify the responsible person(s) for implementing this MCM. There may be more than one person or different departments responsible for various projects. If so, discuss.

18.a.Name: John KlimName: Paul Myers18.bTitle: Chief, Engineering ServiceTitle: GEMS Coordinator18.cDepartment: EngineeringDepartment: Engineering18.d.Address: 1540 Spring Valley Drive18.e.Phone number: 304 429-6755 Ext 2374304 429-6755 Ext 2379

18.e. Phone number: 304 429-6755 Ext 2374 304 429-6755 Ext 2379
18.f. Email address: John.Klim2@va.gov Paul.Myers@va.gov

18.g. Is another entity sharing responsibility for this MCM? If so, who?

# **Control Objective & BMPs**

18.h. State your overall objective for this minimum control measure.

Create and implement a program to reduce pollutants, in stormwater runoff, from construction sites and land disturbance activities of 1 acre or more.

18.i. State and describe your BMPs. Indicate which BMPs are part of your existing program.

BMP	Measurable Goal	Months after SWMP Approval
Construction Permits	The Huntington VAMC will ensure that construction projects disturbing over 1 acre of land; or those projects < than one acre if part of larger common plan, have an approved registration under the WVDEP's General National Pollutant Discharge Elimination System (NPDES) Permit for stormwater associated with construction activities.  1-3 acres – Notice of Intent	In place
SW Control Specifications	>3 – Site Registration Application All plans for construction involving land disturbance of 1 or more acres, or less than one acre if part of a larger common plan, will be subject to review by the Project Review Team to ensure VA spec section 01 57 19 – "Temporary Environmental Controls" is incorporated to address SW runoff.	1 – 2 months
Controls/Compliance	Contractors will handle and dispose	In place

	CCOD: 1 /1 / '11	
	of C&D in such a manner that will	
	prevent contamination of the	
	environment. Each application for	
	progress payment (or at least	
	quarterly) weight tickets, manifest,	
	and/or invoices will be required to	
	assure proper waste disposal.	
SW Control Compliance	The Huntington VAMC project	1-2 months
	COR's will review VA specs and	
	WVDEP stormwater requirements	
	with contractors prior to the	
	commencement of any	
	groundbreaking	
Controls/Compliance	Groundwater protection plans will be	In place
_	submitted for all construction	-
	projects exceeding 3 or more acres	
	and posted at the job site	
Performance Measures	The medical center will track	In place
	Construction and demolition (C&D)	1
	and recycling poundage.	
SW Control Compliance	The construction site contractor will	1 -2 months
•	adhere to stormwater guidelines	
	established in VA specs. Failure to	
	comply with site BMPs is cause for non-	
	compliance and subject to enforcement	
	actions by the VA Contracting Office.	

# **MCM Components**

Part II.C.b.4.a.

18.j. Do you have an Ordinance to control construction site run-off? **No** Part II.C.b.4

18.k. Does your program regulate disturbance of on acre or more and also less than one acre if part of a larger common plan? **Yes** 

Does your Ordinance regulate disturbances of less than one acre? If so, what is the size threshold? N/A The Huntington VAMC will completely follow and abide by WVDEP's general NPDES permit for construction site stormwater.

Part II.C.b.4.a.i-ix.

18.1. Does your Ordinance contain the nine required components?

Tip: The nine required components your ordinance must address include: Sediment & erosion control BMPs; requirements for construction site operators to actually implement these BMPs and to control waste; demonstration of appropriate NPDES registration; authority for site plan review; authority for public input; authority for site inspections & enforcement; adequate funding for inspections & enforcement; and training for construction site operators.

The Huntington VAMC does not have the capacity to enact an ordinance. The Medical Center however will prohibit and reduce the pollutants emanating from construction sites by:

- Informing contractors that appropriate BMPs must be used. A section in the VA contract spec will require such measures.
- Reviewing construction drawings prior to construction to determine if appropriate BMPs are on the site plan and how water quality at the site will be protected.
- COR's will perform weekly site inspections to determine if BMPs are being used correctly. The inspector will also perform inspections within 24 hours after a storm event greater than 0.5 inches of rain per 24-hour period to ascertain the BMP's effectiveness. If appropriate BMPs are not being used, the inspector will inform the contractor and shall oversee that the BMPs are installed/constructed. Inspection reports will be maintained.
- Enforce the contract. If the contractor does not abide by the contract documents, he will be in default of contract.
- Provide information and/or training to individuals working on the construction sites, including site
  operators. The WVDEP BMP Manual will be used as reference material. If training classes become
  available by the WVDEP, the Huntington VAMC will pass along the information to current and
  potential contractors.

## Part II.C.b.4.b.

18.m. Describe the plan review process for your construction site run off program.

A Notice of Intent will be submitted for earth disturbances of one (1) to three (3) acre or greater and a Site Registration Application for projects great than 3 acres The Huntington VAMC will use WVDEP general NPDES permit standards to review construction plans. The Huntington Engineering Project Review Team will review the plans and comment on (if needed)any changes needed to the plans. The contractor will make the changes and resubmit.

- 18.n. Describe the inspection process of your construction site run off program.
  - VA Project Contracting Officer Representatives (COR) will perform weekly site inspections and perform inspections within 24 hours after a storm event greater than 0.5 inches of rain per 24-hour period to ascertain the BMP's effectiveness.
- 18.o. Describe the enforcement process of your construction site run off program.
  - VA Project COR will inform the contractor of any items that need addressed. Failure to institute the BMPs will be construed as a breach of contract and will be reported to the VA Contracting Office for action.

Part II.C.b.4.b.

18.p. Discuss how your program will address the regulation of both private and public sector construction site run-off.

The Huntington VAMC does not have jurisdiction of private construction sites nor the capability to enact or adopt ordinances. The Medical Center will however follow and abide by WVDEP's general NPDES permit for construction site stormwater.

## **Schedule**

Part II.C.b.4.a.

- 18.q. The Ordinance shall be reviewed on an annual basis. Describe your Ordinance review and update procedures. A review of the WVDEP general NPDES permit will be reviewed to see if any information has changed and needs to be updated.
- 18.r. If your Ordinance does not contain the standards required by the permit, provide a schedule for implementation and measureable goals for getting these components into your Ordinance. Include a mid-point and full implementation date.

## Refer to Control Objectives and BMPs 18 i

Tip: The components of your construction site runoff control program must include:

- Plan review and approval process for new development and redevelopment projects
- Inspection protocol
- Development of enforcement strategy
- Education and training for construction site operators
- Development of an application process.
- Record keeping for approved projects, inspections, and enforcement.

## Measurable Goals

Part IV.A. & Part II.B.4

18.s. List and fully describe your measurable goal(s) for this minimum control measure.

- Verify construction projects disturbing over 1 acre of land; or those projects < than one acre if part of larger common plan, have an approved registration under the WVDEP's General National Pollutant Discharge Elimination System (NPDES) Permit for stormwater associated with construction activities.
- COR's will perform weekly site inspections to determine if BMPs are being used correctly. The inspector will also perform inspections within 24 hours after a storm event greater than 0.5 inches of rain per 24-hour period to ascertain the BMP's effectiveness. If appropriate BMPs are not being used, the inspector will inform the contractor and shall oversee that the BMPs are installed/constructed. Inspection reports will be maintained.
- VA Project COR will inform the contractor of any items that need addressed. Failure to institute the BMPs will be construed as a breach of contract and will be reported to the VA Contracting Office for action.
- Track Construction and demolition (C&D) and recycling poundage to assure contractors handle and dispose of C&D in such a manner that will prevent contamination of the environment.

## **Tracking**

Part II.B.7.

18.t. Describe your plan for tracking activities associated with this minimum control measure.

- Verify that each construction project disturbing 1 acre or greater has an approved site registration prior to the commencement of construction. Record the number of projects with a site registration under the general permit.
- Document the number of BMP violations identified during construction site inspections Track Construction and demolition (C&D) and recycling poundage to assure contractors handle and dispose of C&D in such a manner that will prevent contamination of the environment.

# **Evaluation**

Part II.B.7

18.u. Explain how you plan to gauge the effectiveness of your Construction Site Run-off Control program.

The Huntington VAMC will evaluate effectiveness by documenting the number of violations found on construction sites; recording the number of projects with site registrations; and tracking C&D poundage.

# Controlling Run-off from New Development and Redevelopment – MCM #5

Part II.C.b.5

# Responsible Person(s

Identify the responsible person(s) for implementing this MCM. There may be more than one person or department responsible for various portions of this control measure, If so, discuss.

19.a. Name: John Klim Name: Paul Myers

19.b Title: Chief, Engineering Service Title: GEMS Coordinator
19.c Department: Engineering Department: Engineering

19.d. Address: 1540 Spring Valley Drive Address: 1540 Spring Valley Drive

19.e. **Phone number: 304 429-6755 Ext 2374**19.f. **Email address: John.Klim2@va.gov 304 429-6755 Ext 2379 Paul.Myers@va.gov** 

19.g. Is another entity sharing responsibility for this MCM? If so, who?

Tip: This MCM will likely have more than one department responsible for implementation. Often planning, zoning, building, public works; sewer boards, and stormwater managers are involved in the new development and re-development program. Explain who deals with each component of this MCM.

# **Control Objectives & BMPs**

19.h. State your overall objective for this MCM.

Develop and implement a program to reduce pollutants in stormwater runoff from new development and redevelopment projects, disturbing 1 acre or greater, to minimize impacts to stormwater.

## **MCM Components**

## Watershed Protection Elements

Part II.C.b.5.ai.

19.i. Have you incorporated the six watershed protection elements into your subdivision ordinance or equivalent document? Name the document(s) where each element is found & give the review date for the document. \* If there is no review, describe how you will incorporate the element into your document(s).

The Huntington VAMC adheres to federal master specifications, developed nationally by VA Central Office. VA has yet to upgrade its national Construction specifications to comply with runoff from new development and redevelopment. Until such time, work of this magnitude will required the Contracting Officer Representatives (COR) to incorporate site planning, design, construction, and maintenance strategies for the property to maintain/restore, to the maximum extent technically feasible predevelopment hydrology with regard to the temperature, rate, volume, and duration of flow into project design.

Pending state approval of the SWMP, the Huntington VAMC, as a newly permitted MS4, must begin implementation of this MCM within two years of SWMP approval. Implementation includes the process of incorporating the six watershed protection elements into our construction specifications.

Watershed Protection Elements	Name of document that contains the element	*Review Date
1. Minimizing impervious	Contract	2 years after SWMP
surfaces		approval
2. Preserving ecologically	Contract	2 years after SWMP
sensitive areas		approval
3. Reducing thermal impacts	Contract	2 years after SWMP
		approval
4. Reducing or avoiding	Contract	2 years after SWMP
hydromodification		approval
5. Tree protection	Contract	2 years after SWMP
		approval
6. Protection of native soils,	Contract	2 years after SWMP
prevention of compaction of soils		approval

## Part II.C.b.5.a.i.B

19.j. List your quantifiable objectives for each watershed protection element, including time frames to achieve them.

Watershed Protection Element	Short term quantitative objectives	Long term quantitative objectives
Minimizing impervious surfaces	Develop design guidelines for new development to attempt to manage on site the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no precipitation.	Establish a Plan of Action to consider impervious cover reduction through the redevelopment process
Preserving ecologically sensitive areas	Develop design guidelines that buffer ecologically sensitive areas from new construction and redevelopment.	Establish a Plan of Action to consider creating new buffers through the redevelopment process.
Reducing thermal impacts	Develop design guidelines that minimize the area of connected impervious cover flowing to the MS4  Develop design standards that establish a minimum standard for green infrastructure components in new construction and redevelopment.	Establish a Plan of Action to consider using the development and redevelopment process to expand the green infrastructure network.
Reducing or avoiding hydromodification	Develop design guidelines that minimize hydromodification occurring through the development and redevelopment process.	Establish a Plan of Action to consider reconstruction of culverts, and storm water conveyance channels on campus through the development and redevelopment process.
Tree protection	Develop design guidelines that require tree protection during construction, including construction site inspection and enforcement strategies.	Establish a Plan of Action to consider adding more canopy trees on campus.

	Develop design guidelines that require replacement of trees removed during construction.	
Protection of native soils, prevention of compaction of soils	Develop design guidelines to minimize the limit of disturbance on construction sites.  Develop design guidelines to establish minimum standards for topsoil replacement after construction.	Enforce limits of disturbance on all construction sites. Establish a Plan of Action to consider naturalizing turf grass areas on campus to increase groundwater infiltration.

- 19.k. State and describe your BMPs. Indicate if any BMPs are part of your existing program.
  - Add post-construction stormwater management concepts and projects in planning documents
  - Develop a Plan of Action to define authority and procedures for Post-Construction Stormwater Management plan review, site inspections, and enforcement for all projects disturbing one acre or greater.
  - Develop design guidelines and construction standards for new development and redevelopment, including the requirement to develop maintenance plans for new BMP's.
  - Minimize the potential for new spots to discharge pollutants to the MS4 or surface waters.
  - Train staff on Post Construction Stormwater management concepts and Plan of Action
  - Develop an inventory of existing impervious surfaces on the Medical Center campus.

## Site Design Standards

## Part II.C.b.5a.ii.A.1.

19.1. Do you have an ordinance or other enforcement mechanism for the required site design standards? If not, what is your schedule of implementation? Include mid-term and full implementation dates for Ordinance review and enactment.

As a newly-permitted MS4, the permit requires the Huntington VAMC to begin implementation of a Post Construction Stormwater Management Program that meets permit standards within <u>four years</u> of SWMP approval. The Huntington VAMC will initiate a Plan of Action to meet this schedule following the Milestones listed below.

- Present stormwater management concepts to the Engineering Project Review committee.
- Identify the timeframe for the updates needed for the planning documents.
- Consider staff input and begin drafting the Post-Construction Stormwater Management Plan of Action.
- Identify if there are current documents that pertain to the site planning and site design review process.
- Identify if there are current documents that pertain to the Post-Construction Stormwater Management.
- Begin drafting or consider amendments to existing documents to require the attempt to manage the
  first one inch of rainfall in a 24-hr storm, preceded by 48 hours of no precipitation from all new
  impervious surfaces greater than 3000sf.
- Begin drafting or consider amendments to existing documents to incorporate the six Watershed Protection Elements.
- Identify the staff and their roles participating in the Post-Construction Stormwater Management Program.
- Develop training programs for the different staff functions in the Post-Construction Stormwater Management Program.

Tip: The site design standards should include managing the 1st 1-inch of rainfall in a 24-hr storm following 48 hrs without rain.

There are several practices that manage rainfall on site including: canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended infiltration, and evapotranspiration and any combination of these practices.

## Part II.C.b.5.ii.A.2.i,ii

19.m. Does your Ordinance have provisions for reducing pollutant loadings for stormwater discharges from Hot Spots? If the project is a potential hot spot and cannot meet water quality treatment with on-site controls, are there provisions for proper disposal of stormwater discharges at a treatment/disposal facility? VA contract language contains punitive actions for contract work. Disciplinary action will be taken by the Chief Engineer regarding any employee infractions.

## Part II.C.b.5.ii.A.2.iii

19.n. Do you know where drinking water source protection areas are located within your MS4 watershed? Describe how this information will be kept confidential, and made available to WVDEP only when requested.

There are no drinking water source protection areas within the Huntington VAMC MS4 boundary.

Tip: You may need to coordinate with your local Health Department about where additional discharge protections may be needed to comply with source water protection. Document any obstacles that you encounter in regards to this component.

- 19.o. Describe your program for reducing impervious surfaces.
  - The Huntington VAMC will evaluate reducing and minimizing impervious surfaces on a project by project basis. The Huntington VAMC adheres to federal master specifications, developed nationally by VA Central Office. VA has yet to upgrade its national Construction specifications to comply with runoff from new development and redevelopment. Until such time, work of this magnitude will required the Contracting Officer Representatives (COR) to incorporate site planning, design, construction, and maintenance strategies for the property to maintain/restore, to the maximum extent technically feasible pre-development hydrology with regard to the temperature, rate, volume, and duration of flow into project design.
- 19.p. If you choose mitigation/payment in lieu for those projects that cannot implement the one inch runoff reduction requirements, please provide a time frame for creating an inventory of appropriate mitigation projects, and your process to develop standards to value, evaluate, and track transactions. (Note: WVDEP has plans to create standard criteria and guidance material to assist MS4's in developing a mitigation and payment in lieu program. If your MS4 does not already have a mitigation or payment in lieu program make a statement in the SWMP that you do not have one. If you want to use what WVDEP develops, then make a statement to that effect. If you are planning to develop your own mitigation and payment in lieu program, then your SWMP has to include a time frame for development of this program.)

As a non-municipal MS4, the creation of a payment in lieu program does not apply to the Huntington VAMC. However, to support an off-site mitigation program, the Huntington VAMC will evaluate any future projects for new or redevelopment, areas on campus where new infiltration and retention areas

might be installed. These stormwater infiltration BMPs could then be used to offset detention and infiltration requirements from other construction projects on campus. Huntington would also consider using what the WVDEP develops if applicable for a MS4 of our size and limitations.

Part II.C.b.5.ii.B.(1)

19.q. Describe the planning process for new development and redevelopment projects in your MS4. **See Item 19.p. above.** 

Part II.C.b.5.ii.B(2)&(3)

19.r. Describe your plan review and approval process for new development and redevelopment projects.

The Huntington VAMC will evaluate reducing and minimizing impervious surfaces on a project by project basis.

Tip: Plan review, approval and enforcement processes include:

- a. Procedures for review and approval of a pre-application concept plan
- b. Procedures for site plan review and approval
- c. Submittal of as-built drawings
- d. Post construction verification
- e. An educational program targeting internal staff and external project proponents about the stormwater management requirements.

## Part II.C.b.5.ii.C

19.s. Describe your maintenance procedures for structural stormwater control practices including a detailed discussion about maintenance agreements & your ability to enforce them.

Any retention structures constructed by the Huntington VAMC will be maintained by the Medical Center.

Part II.C.b.5.ii.D

19.t. Describe your method of inventory and tracking of stormwater control practices for this MCM. The Huntington VAMC will place stormwater structures on its SW site map.

Tip: The tracking system should accommodate: Source control practices, treatment practices, GIS locations, digital photographs, maintenance requirements, and inspection data.

## Part II.C.b.5.ii.E

19.u. Describe your inspection protocol for ensuring stormwater control BMPs/practices function as designed and constructed: How many per year? How often?

The Huntington VAMC will inspect its structural stormwater controls on a semi-annual basis.

Part II.C.b.5.b.

19.v. Does your MS4 have requirements for street design, parking, and parking lots? If so, which departments regulate this?

The Huntington VAMC utilizes VA Design Criteria Guidelines and where applicable WV DOT specifications for such. Oversight is provided by the Engineering Department.

## **Schedule**

Part II.C.b.5

19.w. Describe how and when you will implement each component of this minimum control measure. Include mid-point and full implementation dates for Ordinance revisions, implementation of plan review and approval, inspection and enforcement procedures, and for developing/acquiring and using a tracking system.

Applicable components of the MCM will be implemented by July 2015 and will be fully implemented by July 2017.

# **Measurable Goals**

Part IV.A

19.x. List and describe your measurable goals for this MCM.

Incorporate low impact design practices where feasible considering space utilization, cost, and function.

## **Evaluation**

Part II.B.7

19.y. Describe how you plan to gauge the effectiveness of your program for this MCM.

The Huntington VA Engineering Project Povious Committee will periodically

The Huntington VA Engineering Project Review Committee will periodically review data on the post construction storm water program and compare to the measureable goals listed in Watershed Protection Table (19i).

# Pollution Prevention/Good Housekeeping for Municipal Operations- MCM #6

#### Part II.C.b.6

# **Responsible Person(s):**

Identify the responsible person(s) for implementing this MCM. There may be more than one person or different departments responsible for various projects. If so, discuss.

20.a. Name: John Klim Name: Paul Myers

20.b Title: Chief, Engineering Service Title: GEMS Coordinator 20.c. Department: Engineering Department: Engineering

20.d. Address: 1540 Spring Valley Drive Address: 1540 Spring Valley Drive

 20.e.
 Phone number: 304 429-6755 Ext 2374
 304 429-6755 Ext 2379

 20.f.
 Email address: John.Klim2@va.gov
 Paul.Myers@va.gov

20.g. Is another entity sharing responsibility for this MCM? If so, who?

# **Control Objectives & BMPs**

20.h. State your overall objective for this MCM.

Develop and implement an operations and maintenance program to reduce or eliminate polluted storm water runoff from the Huntington VAMC campus.

- 20.i. State and describe your BMPs. Indicate if any BMPs are part of your existing program.
  - Review current activities performed by maintenance crews and the materials and methods utilized to identify those operations on the medical center campus with the potential to cause pollution of surface water.
  - Review any existing policies and guidelines to ensure compliance.
  - Educate and train employees on policies.
  - Develop new guidelines where needed, update guidelines and procedures as necessary.
  - Currently training is provided annually to medical center employees on Hazard Communication, Chemical Spill response, as well as SPCC training for Engineering employees

## **MCM Components**

Part II.C.b.6

20.j. List the municipal facilities and their locations owned by your MS4.

Tip: List municipally owned or operated facilities that would reasonably be expected to discharge contaminated runoff and are not covered under a NPDES permit. For example; vehicle maintenance garages, vehicle fueling centers, waste transfer operations, golf courses, recreation areas with fertilizer or herbicide storage, salt or other materials storage, municipal construction activities, waste water treatment plant, potable drinking water treatment plant or open landfills.

Building	Shop	Activities	
Bldg 3	Boiler Plant	Fueling (skid tank)	
		Fleet parking	
Bldg 34	Grounds /Maintenance	Herbicide/pesticide/fertilizer	
		Salt storage	
		Grounds Equipment storage	
		Grounds Equipment Maintenance	
		Landscaping material	
		Car washing	
BRAC	Engineering	Fleet parking	
		E85 Fueling station (End of 2014)	
Campus wide	Engineering	Solid Waste dumpsters (4)	
		Scrap metal dumpster (1)	

#### Part II.C.b.6.a

20.k. Briefly describe your operation and maintenance program for each municipal facility.

Grass clippings, leaves and vegetative debris are composted on site.

Fertilizers, pesticides/herbicides are stored within buildings with concrete floors.

Fleet maintenance is performed off station by area vendors

Used oil is collected and recycled.

Road salt and other deicing materials are stored under roof on concrete floors. Both are purchased by the bag – no bulk storage.

Inspections of all fuel and oil storage locations are conducted at least monthly.

Inspection of hazardous waste chemical storage is conducted weekly.

The Medical Center purchased its own environmentally friendly parts washer – BioCircle - employing a nonhazardous, solvent free cleaning and degreasing solution that removes oil, fat, grease via nonpathogenic bacteria.

## Part II.C.b.6.a

20.1. Does each site have a pollution prevention plan? Is there a spill response plan included in the pollution prevention plan? If not, provide a time frame for developing pollution prevention plans at all MS4 owned municipal facilities, including mid-point and full completion dates.

No. The Medical Center however has developed on standard Pollution Prevention Plan (OS 2- Chapter 9) which covers the entire facility. Spill prevention plans are included in the OS2 manual as well as in the Medical Center's SPCC plan.

## Part II.C.b.6.b

20.m. Have you identified all the lands owned or operated by your MS4? (Such as parks, road right-of-ways, maintenance yards, and water/sewer/stormwater infrastructure.)

Yes

Part II.C.b.6.b

20.n. Describe your overall pollution control approach policy and procedures for these lands.

- Solid waste and infectious medical waste removal is via local contracts. The Medical Center has 3 compactors (solid waste, cardboard, plastic). Cardboard, plastic, wood pallets and scrap metal are recycled.
- Grass clippings, leaves and vegetative debris are composted on site.
- Fertilizers, pesticides/herbicides are stored within buildings with concrete floors and applied by WV
  certified personnel.
- Fleet maintenance is performed off station by area vendors

- Used oil is collected and recycled.
- Road salt and other deicing materials are stored under roof on concrete floors. Both are purchased by the bag no bulk storage.
- Inspections of all fuel and oil storage locations are conducted at least monthly.
- Inspection of hazardous waste chemical storage is conducted weekly.
- The Medical Center purchased its own environmentally friendly parts washer Bio Circle, employing a nonhazardous, solvent free cleaning and degreasing solution that removes oil, fat, grease via nonpathogenic bacteria.
- Grounds personnel will inspect and clean out the facility stormwater catch basins at least semiannually and document via the work order system. Street sweeping is performed during the spring, summer and fall. The Medical Center does not have a means to measure the quantity of sweeping collected and we estimate the equipment is run on average an hour a day 5 days a week during the specified time frame.
- Construction activities performed by the VAMC will have measures in place to guard against erosion. 100% of all site construction projects untaken by the Huntington VAMC will have all appropriate permits and approvals before ground breaking commences and projects exceeding 5,000 square feet will incorporate the use of site planning, design, construction and maintenance strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with the regard to temperature, rate, volume and duration of flow.

Tip: Your policy and procedures plan should address fertilizers, pesticides, and herbicides; sediment and erosion control; landscape maintenance and vegetation disposal; trash management; cleaning and maintenance of building exteriors; chemical and material storage; street sweeping & cleaning of inlets/catch basins.

#### Part II.C.b.6.c

- 20.o. Describe your training program including your target employees, and how often training occurs.

  Training is provided annually to medical center employees on Hazard Communication, Chemical Spill response, as well as SPCC training for Engineering employees
- 20.p. For any industrial facilities owned or operated by your MS4, list each facilities registration number under the WV NPDES General Permit for Storm Water Discharges Associated with Industrial Activities or the individual WV NPDES permit number. If your industrial facilities are not covered under another NPDES permit, you must will prompted to provide additional information below.

  N/A

## **Schedule**

Part II.C.b.6

20.q. Describe how and when you will implement each component of your program for this minimum control measure. Include mid-point and full implementation dates.

Pending approval of our plan by WVDEP, no later than 2 years.

Part II.C.b.6

20.r. Describe the inspection schedule for ensuring municipal facilities are in compliance with pollution prevention plans.

The Medical Center has a very robust Recycling/P2 program and undergoes numerous inspections throughout the year from local and state agencies, as well as VA's own internal review – some conducted by 3<sup>rd</sup> party consultants. As stated within this document the Medical Center conducts its own internal reviews.

## Measurable Goals

Part IV.A

- 20.s. List and fully describe your measurable goals for this MCM.
  - The Huntington VAMC will review existing policies on a biannual basis and update as appropriate to maintain compliance. SPCC is updated every 5 years per federal law and certified via a Professional Engineer. .
  - Employees will be trained on the procedures applicable to their work area annually.
  - Grounds personnel will inspect and clean out the facility stormwater catch basins at least semiannually and document via the work order system. Street sweeping is performed during the spring, summer and fall. The Medical Center does not have a means to measure the quantity of sweeping collected and we estimate the equipment is run on average an hour a day 5 days a week during the specified time frame.
  - Construction activities performed by the VAMC will have measures in place to guard against erosion.

## **Tracking**

Part II.B.7 & Part II.C.b.6.a.iii

20.t. Describe your plan for record keeping and tracking of facilities, employee training, pollution prevention plans, and inspections for this MCM.

Medical Center employee training is documented via the VA Talent Management System (TMS) database; Various inspections and work orders are maintained via the computer record systems (DHCP Work Order system), Excel Spreadsheet; and/or Greenhealth Tracker data base)

## **Evaluation**

Part II.B.7

20.u. Explain how you plan to gauge the effectiveness of your good housekeeping/ municipal operations program efforts?

The Huntington VAMC will utilize its Green Environmental Management System (GEMS) Committee to track/monitor all activities of is storm water management program. Committee will review inspection findings, reports and data to evaluate effectiveness.

## **Industrial Stormwater Coverage for Municipal Operations**

If your facility/s discharges stormwater from any industrial operation that is not covered under another NPDES permit, you must now obtain coverage for those discharges.

20.v. For each facility, provide the name and contact information of the operator if applicable. N/A - No industrial activities within the MS4.

20.w. For each outlet, list the latitude and longitude to the nearest second and the River Mile Point (if known). N/A

Outlet	Longitude	Latitude	River
Number	-		Mile

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	

- 20.x. List the Standard Industrial Classification (SIC) Code designated for your facility/s.
  - 8062
- 20.y. List the nature of activity at the industrial facility.

# **Department of Veterans Affairs Medical Center**

- 20.z. Is there a wet pond at your facility that collects runoff from areas on which industrial activities occur? If so, how many acres drain into it?
  - No
- 20.aa. Is there a dry pond at your facility that collects runoff from areas on which industrial activities occur? If so, how many acres drain into it?
  - No
- 20.bb. Do any of your storm water outlets discharge through an oil water separator? If yes, provide the outlet numbers.

No

Based on your responses to this section, a Discharge Monitoring Report may be issued.